

Serial No. 10/025,462

REMARKS

In a Final Office Action dated July 20, 2004, (hereinafter Office Action), all pending claims were rejected under 35 U.S.C. §102 or under 35 U.S.C. §103 as either anticipated or obvious in view of Hayashi (US 6,319,742), Kume (US 5,923,690), and Jie, et al. (US 6,287,884). In response, Applicant has amended the claims and respectfully submits that the cited references do not disclose the claimed amendment.

In particular, Applicant respectfully submits that none of the references forms the burying layer described. Hayashi shows a Silicon dioxide burying layer grown on a metal. Hayashi does not disclose nor suggest a nitride burying layer consistently doped throughout.

The remaining two references, Kume and Jie rely on a reversed bias p-n junction in the burying layer to prevent carrier flow. Kume relies on a P-N-P-N doped structure, at least one the p-n junctions being reverse biased to prevent carrier penetration. Jie also includes an n-p-n structure biased to prevent carrier penetration.

The operation of the burying layer in the disclosed invention does not rely on reverse biased p-n junctions. Thus Applicant has amended all independent claims to claim that the burying layer is either p-doped throughout, n-doped throughout, or intrinsic throughout. None of the three references, either together or individually disclose such a structure. Thus Applicant respectfully submits that none of the three references either anticipates nor renders obvious the claims as amended.

In view of the preceding amendments, Applicant respectfully submits that all claims are allowable over the cited prior art references. The undersigned Xerox Corporation attorney (or agent) hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

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If Examiner believes that a teleconference would facilitate prosecution of this application, Applicant respectfully requests that the Examiner contact the undersigned.

Respectfully submitted,



Kent M. Chen
Attorney for Applicants
Registration No. 39,630
(310) 333-3663
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